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COOLING DEVICE WITH CERAMIC STORAGE COMPARTMENTS

The present invention relates to a cooling device comprising an inner chamber provided with a placement device comprising at least one placement surface for placing food or other items. The placement device can comprise, for example, a support plate, a door compartment or a pull-out box.

Placement devices of present cooling devices are made of plastics, glass and/or metal. Placement devices especially of transparent plastics have the disadvantage that they are sensitive to scratching. Their shelf areas can thus become matt after usage for a fairly long time. In addition, placement devices made of plastic tend to bend under high weight loading. Placement devices made of glass are very sensitive to impact. They therefore need to be reinforced at least at the edges, for example, using a plastic. Metal-grid placement devices have the disadvantage that items can fall through the holes in the grid. In addition, items such as cups can easily tip on these.

It was thus the object of the present invention to provide a cooling device of said type which overcomes these disadvantages of the prior art.

20 The object is solved by a cooling device according to claim 1. The dependent claims relate to preferred embodiments.

25 According to this, a cooling device comprising at least one placement device for items to be placed, such as food, is provided. The placement device comprises a shelf area of a ceramic material.

30 The advantage of this is that ceramic material has a high scratching resistance. The ceramic shelf area thus remains respectable even when used for fairly long time. In addition, ceramic material has a high strength. The placement device thus does not bend under high loads. In addition, ceramic material is not sensitive to impact. Thus, it is not necessary to reinforce the edges of the shelf area with other materials, as is usually the case with placement devices made of glass for example.

Preferably, the at least one placement device is fabricated in one piece from ceramic material. The advantage of this is that such a placement device can be fabricated simply and therefore inexpensively.

5 The cooling device preferably comprises a plurality of placement devices. These can, for example, comprise support plates, door compartments or pull-out boxes.

In general, the ceramic material is provided with a glaze. This protects the ceramic material from contamination. In addition, its mechanical strength and 10 chemical resistance is enhanced. Furthermore, the placement device acquires a visually appealing shine as a result of the glaze.

In order to ensure an appealing appearance, the placement device can contain 15 pigments, preferably in the glaze. It is hereby possible to configure the placement devices in different colours or colour combinations.

The at least one placement device can have under-glaze decoration and/or above-glaze decoration. It is thereby possible, for example, to apply writing with the company name of the refrigerator manufacture on the placement device.

20 Two of the placement devices are preferably differently coloured.

The cooling device according to the invention can be a cooling device such as a refrigerator or refrigerating box or a freezing device such as an upright freezer or 25 a chest freezer. The devices can be used in private households as domestic appliances and in the trade or in the catering business.

Further embodiments and advantages of the present invention are explained 30 hereinafter with reference to an embodiment of the present invention. In the figures:

Fig. 1 is a perspective view of a cooling device 1 according to the present invention; and

35 Fig. 2 is a perspective view of a pull-out drawer 7.

Figure 1 shows a cooling device 1, here in an embodiment as a refrigerator 1, comprising a body 2 and a door 3. The cooling device 1 comprises an inner chamber 4. Food or other items to be cooled can be stored therein generally at temperatures of about 0°C to about 10°C. The cooling device comprises placement devices such as support plates 6, pull-out drawers 7 and door compartments 9 for placing the items. The door compartments 9 are affixed to the door 3 and specifically to the door inner wall 8. The body 2 of the cooling device 1 comprises two side walls 10 facing the inner chamber 4, which are provided with guide rails 11 for the support plates 6 and a bottom surface 12 on which the pull-out drawers 7 rest.

The support plates 6 are fabricated in one piece from a ceramic material. A glaze with colour pigments covers the entire surface of the support plates 6. The support plates 6 each comprise a top 13 whose entire area forms a shelf area 14 for items to be placed.

Figure 2 shows a perspective view of one of the pull-out draws 7 from Fig. 1. The pull-out drawer 7 has a bottom 15 which forms a shelf area 14' for items to be placed, and side walls 16. The weight of the items inserted in the pull-out drawers 7 which are not shown here acts on the shelf area 14'. The pull-out drawer 7 is fabricated in one piece from a ceramic material with a glaze covering the surface of the pull-out drawer 7. However, it is also possible to merely fabricate the bottom 15 of a ceramic material especially over its total thickness and to form the side walls 16 for example of a transparent plastic.

The door compartments 9 shown in Fig. 1 like the pull-out draws 7 from Fig. 2 comprise a bottom 17 which forms a shelf area 14" and side walls 16. The door compartments 9 are fabricated in one piece from a ceramic material with a glaze. In the case of the door compartments 9 however, only the bottoms 17 can consist of a ceramic material and the side walls 16 can be made of a different material.

The glazes with which the support plates 6, the pull-out drawers 7 and the door compartments 9 are each provided can be provided with different pigments. For example, the glaze of the support plates can be mixed with pigments in an earth shade and that of the pull-out drawers 9 can be mixed with white pigments. Thus, the placement devices can be configured as differently coloured.

The door compartments 9 can be provided with an under-glaze decoration or an over-glaze decoration on their respective front sides 19. For example, the company name of the manufacturer may be applied.

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In addition to colouring the glaze, it is also possible to provide the ceramic material forming the support plates 6, the pull-out drawers 7 and the door compartments 9 with colour pigments. In this case, a glaze should be transparent if desired.

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